

## CLAIMS:

1. Bandwidth extension device comprising an input for receiving an input signal, filter means for filtering the input signal, creating means for creating an adapted signal with a lower frequency part than the input signal, characterized in that the bandwidth extension device comprises at least a first and a second signal path each having filter means and  
5 creating means for creating a first and a second adapted signal, analyze means for comparing the first and second adapted signal with the input signal, and summing and weighting means for selecting the adapted signal which corresponds most with the input signal.

2. Bandwidth extension device as claimed in claim 1, characterized in  
10 that the bandwidth extension means comprise switching means to switch between a first and a second signal path.

3. Bandwidth extension device as claimed in claim 1, characterized in  
15 that the analyze means control the creating means.

4. Bandwidth extension device as claimed in claim 1, characterized in  
15 that the weighting means comprise mixers.

5. Audio reproduction system comprising a bandwidth extension device.

6. Audio reproduction system as claimed in claim 5, characterized in  
20 that the audio reproduction system comprises time delay means to compensate for delay in the bandwidth extension device.